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10/565,901	01/24/2006	Peter Herring	DEHN01005US0	7477
28554 7590 03/04/2009 Vierra Magen Marcus & DeNiro LLP 575 Market Street, Suite 2500 San Francisco, CA 94105				
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LIU, XUE H				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/565,901

Applicant(s)

HERRING, PETER

Examiner

XUE LIU

Art Unit

1791

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 50-98 is/are pending in the application.
- 4a) Of the above claim(s) 86-98 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 50-85 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 January 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/S508)
Paper No(s)/Mail Date 1/24/06
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 50-85, drawn to a method of forming a molding by injection molding in a magnetic field to change to orientation and/or distribution of magnetic particles in the molding material.

Group II, claim(s) 86-94, drawn to a molding apparatus for injection molding of a material comprising magnetic particles in a magnetic field to change to orientation and or/distribution of magnetic particles in the molding material.

Group III, claim(s) 95, drawn to an article formed by injection molding a material comprising magnetic particles wherein the orientation and/or distribution of the magnetic particles is changed by a magnetic field.

Group IV, claim(s) 96-98, drawn to a mold for injection molding plastics, said mold having one or more openings receiving a non-magnetic insert, said non-magnetic insert comprising a magnetic insert.

2. The inventions listed as Groups I-III and IV do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: the special technical feature of the Groups I-III invention is changing the orientation and/or distribution of magnetic particles in molding materials by a magnetic field which is not present in Group IV. The special technical feature of the Group IV invention is the specific claimed structure of one or more openings in a mold receiving a non-magnetic insert comprised of a magnetic insert which is not present in Groups I-III. The common technical feature in Groups I-III is changing the orientation and/or distribution of magnetic particles in molding materials by a magnetic field. This element cannot be a special technical feature under PCT Rule 13.2 because the element is shown in the prior art. US Patent 5,145,614 teaches a process for making a magnet made of resin by injecting a resin containing a magnetic powder into a mold for molding and applying a magnetic field for multiple-pole orientation thereon.

3. During a telephone conversation with Burt Magen on 10/27/08 a provisional election was made without traverse to prosecute the invention of Group I, claims 50-85. Affirmation of this election must be made by applicant in replying to this Office action. Claims 86-98 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

4. The examiner has required restriction between product and process claims. Where applicant elects claims directed to the product, and the product claims are subsequently found allowable, withdrawn process claims that depend from or otherwise require all the limitations of the allowable product claim will be considered for rejoinder. All claims directed to a nonelected process invention must require all the limitations of an allowable product claim for that process invention to be rejoined.

In the event of rejoinder, the requirement for restriction between the product claims and the rejoined process claims will be withdrawn, and the rejoined process claims will be fully examined for patentability in accordance with 37 CFR 1.104. Thus, to be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101, 102, 103 and 112. Until all claims to the elected product are found allowable, an otherwise proper restriction requirement between product claims and process claims may be maintained. Withdrawn process claims that are not commensurate in scope with an allowable product claim will not be rejoined. See MPEP § 821.04(b). Additionally, in order to retain the right to rejoinder in accordance with the above policy, applicant is advised that the process claims should be amended during prosecution to require the limitations of the product claims. **Failure to do so may result in a loss of the right to rejoinder.** Further, note that the prohibition against double

patenting rejections of 35 U.S.C. 121 does not apply where the restriction requirement is withdrawn by the examiner before the patent issues. See MPEP § 804.01.

Drawings

5. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: reference characters 42 in figs. 1 and 5, reference character 24'a in fig. 5, and reference character 19a in figs. 5-8. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.

- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.
- (f) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.
 - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (g) BRIEF SUMMARY OF THE INVENTION.
- (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (i) DETAILED DESCRIPTION OF THE INVENTION.
- (j) CLAIM OR CLAIMS (commencing on a separate sheet).
- (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claim 80 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 80, the claim is indefinite when the claim is read as "wherein said first or second or third materials comprise different weight percentages of magnetic particles". For examining purposes, the claim is interpreted to read as "wherein said first and second or third materials comprise different weight percentages of magnetic particles, or alternatively, "wherein said first or second material and third materials comprise different weight percentages of magnetic particles".

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claim 85 is rejected under 35 U.S.C. 102(b) as being anticipated by Kuroda (US 5,145,614).

Regarding claim 85, Kuroda teaches a method of forming a molding by injection molding, said method comprising: injecting a molding material into a mold, said molding material comprising magnetic particles; and applying a magnetic field to change the orientation of magnetic particles in said molding material (abstract, col. 8, lines 17-49 and claim 1).

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 50-51, 56-57, 61, 71-79 and 81-84 are rejected under 35 U.S.C. 103(a) as being unpatentable over Easterlow et al. (US 5,562,979) in view of Chu et al. (US 5,942,324).

Regarding claim 50, Easterlow et al. teach a method of forming a molding 11 by multiple injection molding, said method comprising: injecting a first material 23a into a mold 10; injecting a second material 24a into said mold behind said first material so that said first material covers a surface 14a of said mold, wherein the first material includes metallic or mineral flakes

40. Easterflow et al teach that the process can be used to produce by injection molding various body components of a motor vehicle having a paint finish provided by the coating material 23 (abstract, figs. 1-9, col. 1, lines 14-19, col. 3, lines 59-67 to col. 4, lines 1-6, col. 5, lines 5-17, 28-33 and 64-67). Easterflow et al. do not positively teach that the metallic or mineral flakes include magnetic particles. However, it would have been obvious to one of ordinary skill in the art that both ferromagnetic metals or minerals and non-ferromagnetic metals or minerals can be added to the coating material since both ferromagnetic and non-ferromagnetic metals can be used to add a metallic finish to the coating. Easterflow do not teach applying one or more magnetic fields to at least a portion of at least one of said materials so as to change the orientation and/or distribution of magnetic particles in at least one of said materials. However, Chu et al. teach a coated exterior mirror housing for vehicles. Chu et al. teach that a plurality of particles or flakes of metal, mica or the like may be included in the coating; if made from a ferromagnetic metal, those particles may be oriented in a desired array using magnetic force prior to final set up or cure of the coating. Chu et al. further teach that the resinous polymeric materials from which housing is formed may also include particles or flakes of metal or mica as described above (col. 3, lines 19-29 and col. 8, lines 7-19). It would have been obvious to one of ordinary skill in the art to provide ferromagnetic metal particles in the coating material as taught by Chu et al. in the injection molding method of Easterflow et al. since Chu et al. teach that the magnetic particles can be oriented uniformly within the coating by a magnetic force to thereby enhance the appearance and metallic effect from the particles (col. 8, lines 7-14).

Regarding claim 51, Easterflow et al. teach that the second material is injected into the mold before said first material has cured completely (col. 3, lines 59-67 to col. 4, lines 36).

Regarding claim 56, Chu et al. teach that the magnetic field changes the orientation and/or distribution of all of said magnetic particles in order to give a desired visual effect in the coating layer of the molding (col. 8, lines 7-14).

Regarding claim 57, Chu et al. teach that the magnetic fields orientate and/or distribute the magnetic particles substantially uniformly (col. 8, lines 7-14).

Regarding claim 61, Chu et al. teach that the particles are oriented in a desired array using magnetic force prior to final set up or cure of the coating layer (col. 3, lines 26-29 and col. 8, lines 7-11).

Regarding claim 71, Easterflow et al. teach that the metallic or mineral particles 40 have an elongated, non-spherical shape (see fig. 7).

Regarding claims 72-79, Chu et al. do not positively teach that the magnetic particles comprise about 2% of the weight of at least one of said materials. However, it would have been obvious to one of ordinary skill in the art to use a small amount of magnetic particles in the molding materials since increasing the amount of magnetic particles in the molding materials increases the composition viscosity, reduces the fluidity, making the molding difficult and bubble inclusion inevitable so it is not appropriate. Additionally, it would have been obvious to vary the amount of metal particles to obtain the desired appearance and color of the molded part.

Regarding claims 81-82, Easterflow et al. teach that the coating material is injected into the mold while the mold is at a temperate in a range of 20°C to 100°C (col. 3, lines 59-61).

Regarding claim 83, Easterflow et al. teach that the molding is partially cured in the mold and is heated until completely cured after removal from the mold (col. 4, lines 25-27, col. 4, lines 64-67).

Regarding claim 84, while the combined teachings of Easterflow et al. and Chu et al. do not positively suggest applying one or more further magnetic fields to the molding after it has been removed from the mold, it would have been obvious to one of ordinary skill in the art to do so to modify the orientation of the magnetic particles since they can still be oriented by a magnetic field while the molding is not completely cured to obtain the desired appearance or color of the molded part.

12. Claims 52-55 and 80 are rejected under 35 U.S.C. 103(a) as being unpatentable over Easterflow in view of Chu et al. as applied to claim 50 above, and further in view of Spain et al. (US 6,579,397).

Regarding claim 52, Easterflow et al. do not teach injecting at least a third material into said mold after said second material is injected. However, Spain et al. teach a paint coat 44 for the exterior surface of a molded plastic car body member or panel 118 which includes an exterior clear coat 45 above a color coat 46 (abstract, fig. 4 and col. 8, lines 25-55). It would have been obvious to one of ordinary skill in the art to inject a third material into the mold after the second material is injected into the mold in the injection molding process of Easterflow et al. in order to mold a coating layer with multiple layers as taught by Spain et al. since Spain et al. teach that it's advantageous to provide a clear coat layer as the clear coat layer can provide the majority of the durability, gloss, and other appearance properties necessary for use as an exterior automotive paint coat (col. 5, lines 46-57).

Regarding claim 53, since Easterflow et al. teach that the second material is injected into the mold before said first material has cured completely to ensure good bonding between the two layers (col. 3, lines 59-67 to col. 4, lines 1-24), therefore it would have been obvious to one of

ordinary skill in the art to inject the third material into the mold before said second material has cured completely to ensure good bonding of the second material and the third material in view of the teaching of Easterflow et al.

Regarding claim 54, as stated above in paragraph 9 regarding claim 50, the combined teachings of Easterflow et al. and Chu et al. teach that the first material comprises magnetic particles.

Regarding claim 55, Easterflow et al. do not teach that the first and/or second and/or third material is substantially translucent or transparent. However, Chu et al. teach that the coating material is generally transparent (abstract, col. 2, lines 25-32 and 50-55, col. 5, lines 46-57, col. 8, lines 20-31). It would have been obvious to one of ordinary skill in the art to provide the teaching of Chu in the injection molding process of Easterflow et al. since Chu et al. teach that the transparent coating increases gloss and depth of color in appearance (col. 2, lines 25-32, col. 5, lines 46-57).

Regarding claim 80, since the third material that forms the clear coat layer as taught by Spain et al. does not contain any magnetic particles, the third material and the first or second materials clearly comprise different weight percentages of magnetic particles.

13. Claims 56 and 71 are rejected under 35 U.S.C. 103(a) as being unpatentable over Easterflow et al. in view of Chu et al. as applied to claim 50 above, and further in view of Kashiwagi et al. (EP 0556449).

Regarding claim 56, while Chu et al. teach changing the orientation and/or distribution of all of the magnetic particles in order to give a desired visual effect in the coating layer of the molding, Kashiwagi et al. teach a method for making a painted product with magnetically

formed pattern by using a paint medium containing magnetic bodies which are oriented by a magnetic force to form the desired pattern to be formed on the painted product (page 2, lines 5-10, page 3, lines 14-28, page 13, lines 37-41 and claim 12). It would have been obvious to incorporate the teaching of Kashiwagi et al. in the injection molding method of Easterflow et al. and Chu et al. since it would be desirable to form patterns on a vehicle body to enhance the aesthetic appearance of the product.

Regarding claim 71, Kashiwagi et al. teach that the magnetic particles are non-spherical shape (page 3, lines 1-28 and claim 12).

14. Claims 58-59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Easterflow et al. in view of Chu et al. as applied to claim 50 above, and further in view of Jarrard (US 6,106,759).

Regarding claim 58, Chu et al. do not teach that the strength of said magnetic fields is varied with time. However, Jarrard teaches a controlling the orientation of magnetic particles during injection molding by imparting a variable magnetic field strength in the mold cavity (abstract, col. 1, lines 14-31, col. 3, lines 19-36). Therefore it would have been obvious to one of ordinary skill in the art to incorporate the teaching of Jarrard in the injection molding method of Easterflow et al. since Jarrard teaches that varying the strength of the magnetic field controls the orientation of the magnetic particles.

Regarding claim 59, Jarrard teaches using an electromagnet to orient the magnetic particles (col. 1, lines 14-31, col. 3, lines 7-36). Jarrard does not teach the strength of the magnetic fields is varied by varying the power delivered to the electromagnet with time. However, it would have been obvious to one of ordinary skill in the art to vary the power

delivered to the electromagnet with time since it would achieve the desired effect of modifying the strength of the magnet field.

15. Claim 60 is rejected under 35 U.S.C. 103(a) as being unpatentable over Easterflow et al. in view of Chu et al. as applied to claim 50 above, and further in view of Wagner et al. (US 6,000,922).

Regarding claim 60, Easterflow et al. and Chu et al. do not teach that the strength and/or location of said magnetic fields is varied with time by moving one or more permanent magnets or electromagnets relative to said mold. However, Wagner et al. teach adjustably moving a permanent magnet relative to a mold to efficiently adjust the magnetizing position of the permanent magnet for inducing relatively precise magnetic development fields in a molding material molded within the molding cavity (abstract, col. 4, lines 1-15, col. 7, lines 36-53 and col. 9, lines 21-24). Therefore it would have been obvious to one of ordinary skill in the art to provide the teaching of Wagner et al. in the injection molding method of Easterflow et al. and Chu et al. to induce precise magnetic field in the molding material as taught by Wagner et al.

16. Claims 62-66 and 68-69 are rejected under 35 U.S.C. 103(a) as being unpatentable over Easterflow et al. in view of Chu et al. as applied to claim 50 above, and further in view of Phillips et al. (WO2002/090002).

Regarding claim 62, Chu et al. do not positively teach that the magnetic particles comprise nickel. However, Phillips et al. teach a method for producing imaged coated articles by applying a magnetic field to magnetic pigments to alter the orientation of selected magnetic particles. Phillips et al. teach that the magnetic particles can be formed of any magnetic material such as nickel (see abstract, page 13, lines 19-21). Therefore it would have been obvious to one

of ordinary skill in the art to use nickel as the magnetic particles since Phillips et al. teach that nickel is a suitable material that can be oriented by a magnetic field.

Regarding claim 63, Phillips et al. do not positively teach using leafing grade nickel flakes. However, it would have been obvious to one of ordinary skill in the art to use leafing grade nickel flakes so that these particles will be visible in the outside surface to enhance the appearance and metallic effect of the coating layer in the inventions of Easterflow et al. and Chu et al.

Regarding claim 64, Phillips et al. teach that the magnetic particles comprise a core and an outer coating (page 13, lines 3-18).

Regarding claim 65, Phillips et al. teach that the core is a magnetic material (page 13, lines 3-18).

Regarding claim 66, Phillips et al. teach that the coating is aluminum (page 13, lines 3-14).

Regarding claim 68-69, Phillips et al. teach that the magnetic particles may be selected for its reflecting or absorbing properties (page 13, lines 31-32).

17. Claim 67 is rejected under 35 U.S.C. 103(a) as being unpatentable over Easterflow et al. in view of Chu et al. and Phillips et al. as applied to claim 64 above, and further in view of Kiichi (English abstract of JP 01-259916).

Regarding claim 67, Phillips et al. do not teach that the coating is colored. However, Kiichi teaches a coloring material 1 for molding is constituted of a magnetizing material 2, around which a coloring pigment 3 is coated and integrated thereon (see figs. 1-2 and English abstract). It would have been obvious to one of ordinary skill in the art to incorporate Kiichi's

teaching in the combined teaching of Easterflow et al., Chu et al. and Phillips et al. to further enhance the appearance of the coating layer.

18. Claim 70 is rejected under 35 U.S.C. 103(a) as being unpatentable over Easterflow et al. in view of Chu et al. as applied to claim 50 above, and further in view of Blume (2003/0189475).

Regarding claim 70, Chu et al. do not positively teach that the magnetic particles are substantially spherical. However, Blume teaches that due to the regular, spherical shaped of magnetic particles, the particles are coated more effectively than the irregular crushed ribbon particles and further teaches that spheres do not have a tendency to fracture (paragraph 13). It would have been obvious to one of ordinary skill in the art to use spherical magnetic particles in the coating layers of Easterflow et al. and Chu et al. since Blume teaches the benefits of using spherical particles.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to XUE LIU whose telephone number is (571)270-5522. The examiner can normally be reached on Monday to Friday 9:30 - 6:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Phillip Tucker can be reached on (571)272-1095. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/X. L./

Examiner, Art Unit 1791

/Philip C Tucker/

Supervisory Patent Examiner, Art Unit 1791